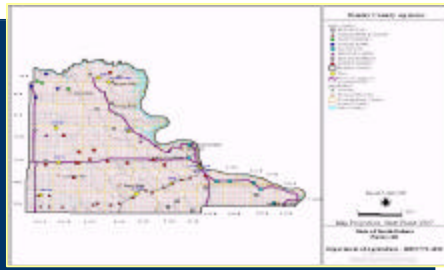


Apiary maps available on the internet



Maps denoting bee colony locations are now available at the South Dakota Department of Agriculture internet site. These maps are available for all sixty-six South Dakota counties simply by clicking your mouse button on the county of your choice.

The maps available for download from this site are image files of maps created using a geographic information system (GIS). The maps will continue to be updated as colony locations are altered.

If the on-line maps do not provide the resolution you need, then you can fill out an on-line request form to get a 17" x 22" hard copy of the map sent to

you. Individuals are asked to limit the number of hard copy maps requested to five per year. Each additional hard copy map after that will be at a cost of \$50 per map.

To see the on-line maps, visit the Department of Agriculture internet site at "www.state.sd.us/doa/das/hp-apiar.htm". You can fill out the on-line request form here if you wish to have a 17" x 22" hard copy map. These images are also available by calling 605-773-3796 or sending your address and the county you want a map of to:

SD Department of Agriculture
523 E Capitol Ave
Pierre, SD 57501-3182



Plant-back and Pre-harvest Restrictions

With harvest season in progress, many of us will soon consider when to harvest and what to plant during next year's planting season. While doing so, it is important to review pesticide applications that have been made and determine any plant-back and pre-harvest restrictions listed on pesticide labels.

Insecticide applications made to sunflowers, alfalfa and corn may have pre-harvest restrictions to follow. Desiccant applications, likewise, can be expected to have pre-harvest restrictions listed on the pesticide labels.

Reviewing pesticide label plant-back restrictions will also help determine if the pesticide applications made this year will affect the planned crop for next year.

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SD DEPT OF AGRICULTURE
523 E CAPITOL AVE
PIERRE, SD 57501-3182
TELEPHONE: 605-773-4432
FAX: 605-773-3481
INTERNET:
www.state.sd.us/doa/das

GRAIN FUMIGATION

The most common causes of violations in South Dakota grain are:

- 1) Bins and railcars are not being placarded as required by product labels.
- 2) Application records, as required by South Dakota Law, are not being kept.
- 3) Applicators are not certified in the proper category to apply fumigants.

The only way to effectively and safely use phosphine fumigants is to follow the label directions. It is important to remember these substances are toxic and potentially harmful to humans. Using approved application methods and placarding all storage bins containing treated grain and transports carrying fumigated grain are our best means of ensuring the safety of all grain handlers.

Commodity Temperature

Phosphide labels require the internal commodity temperature be tested before the fumigant is applied. If the internal commodity temperature is below 40 degrees F, fumigation is not to be conducted as the temperature is too low for the phosphide tablets to react. If applied to cold grain, unspent tablets will not begin to react until the temperature rises.



Courtesy Oklahoma Extension Service

Placarding

Phosphide labels require the applicator to placard or post all entrances to the fumigated area with signs bearing:

- 1) The signal word "DANGER" and the skull and crossbones symbol in red.
- 2) The statement, "Area and or commodity under fumigation, DO NOT ENTER."
- 3) The statement, "This sign may only be removed after the commodity is aerated (contains 0.3 ppm or less phosphine gas). If incompletely aerated commodity is transferred to a new site, the new site must also be placarded and workers must not be exposed to more than 0.3 ppm phosphine."
- 4) The date and time fumigation begins and is to be completed.
- 5) Name of fumigant used.
- 6) Name, address and telephone number of the applicator.



Placards on railroad cars must be placed on both sides of the car near all ladders, hatches and doors and may not be removed until the treated commodity is

completely aerated. The commodity must be monitored until it contains 0.3 ppm, or less, phosphine gas in the air space around and, when feasible, in the mass of the commodity. If more than 0.3 ppm is detected, the placard must be transferred with the treated commodity.

Failure to properly placard fumigated areas may expose inspectors, samplers, and other grain handlers working in and around the commodity to dangerous levels of fumigants. Because applications to commodities are not obvious if placards are not properly posted, individuals may not realize the

grain has been treated until after exposure has occurred.

Vehicles under fumigation cannot be transported over public roads or highways.

Fumigant Safety



Courtesy Oklahoma Extension Service

Phosphine gas produced in a sealed area can cause severe poisoning to an individual upon opening. Direct inhalation of toxic phosphine fumes may cause weakness, tremors, vomiting, coughing, difficult or labored respiration, and possibly pulmonary edema. For safety purposes, phosphide labels require applicators and grain handlers to wear respiratory protection during exposure to grain fumigant concentration in excess of 0.3 ppm, or when concentrations are unknown.

Application Records

Fumigation of grain is considered a pesticide application. An application made by an elevator employee to co-mingled grain is considered a commercial application. Therefore, in accordance with South Dakota Law, each application of a pesticide, including phosphine, to storage bins, railcars or other sites, require completion of commercial pesticide application records. Private applicators must also maintain records for restricted-use pesticide applications made to their stored grain.

NEW LEADERSHIP AT DEPARTMENT



Larry Gabriel recently took over as Secretary of Agriculture. Mr. Gabriel and family own and operate ranches in Haakon and Pennington Counties. He relates "I'm still actively involved and making my living in agriculture."

Mr. Gabriel was a County Commissioner from 1975 to 1982. In 1983, he was elected to the state legislature where he served in the House of Representatives until 1998. During Mr. Gabriel's time in the House, he served six years as House majority leader.

"South Dakota is extremely fortunate that someone of Larry Gabriel's high caliber is willing to return to public service," said Governor Janklow. We look forward to working with Secretary Gabriel as we continue to serve South Dakota's agricultural producers and industry.

BURNING PESTICIDE CONTAINERS

With the spray season ending, it is the time most of us think about cleaning up empty pesticide containers. As we begin this cleanup, it is important to consider regulations regarding pesticide container disposal. State rules prohibit the open burning of pesticide containers except by the user of small quantities of combustible containers which do not exceed more than one day's accumulation or more than 50 pounds. This would equate to approximately 66 - 2.5 gallon containers.

Open burning of unrinsed pesticide containers can have other ramifications. Especially if the burning of these unrinsed pesticide containers cause injury to humans, vegetation, crops, livestock, wildlife, or beneficial insects or pollute groundwater or surface water.

It is also important to note that all pesticide labels require that containers be rinsed prior to disposal.

The Department offers a container recycling program and conducts several pickups around the state. Contact the Department (1-800-228-5254) or your county extension agent for more information.

HOT DRY CONDITIONS CAN EFFECT NITROGEN FERTILIZER MANAGEMENT

Warm temperatures and dry weather conditions have prevailed over the state this fall. The SD Agricultural Statistics Service reports topsoil moisture conditions are very short in 29% of the state and 42% of the state is short. Soil temperature reports range from mid to upper 60's in the east to mid 70's to 80's in the west.

These conditions can lead to errors in nitrogen recommendations based on fall soil nitrate tests and allow for losses of fertilizer nitrogen. Nitrogen recommendations published by SDSU require a sampling date adjustment if soil samples are taken before September 15th to compensate for additional nitrogen that is released from the decay of organic material. Furthermore, conversion of ammoniacal forms of nitrogen proceeds at a significant rate until soil temperatures cool to 56°F. Although moisture is critical in this process, conversion can occur when soil moisture is minimal. Field conditions this fall favor transformation of ammoniacal-nitrogen to nitrate, which have a high potential to leach from the root zone in spring when precipitation is normally highest. Conditions this fall favor a situation that increase the potential to over apply nitrogen fertilizer and losses due to leaching in the spring.

High fall temperatures can also lead to significant volatilization losses of nitrogen if fertilizer is surface applied where high amounts of crop residue are on the surface. Warm moist conditions favor volatilization losses of nitrogen. Although field conditions may be dry in most regions of the state, situations where high levels of crop residue remain on the surface create a climate conducive for the conversion of urea to ammonia. Warm temperatures during the day increase the potential for volatilization losses.

When conditions exist similar to this fall, producers may wish to consider postponing nitrogen fertilizer applications until soil temperatures cool to 56°F. On winter grains, an option may be split applications if incorporation of nitrogen fertilizer is not an option; the potential of nitrogen to be lost this spring due to leaching still remains. Producers are urged to consider their options and develop a strategy that will minimize losses of nitrogen. Reducing nitrogen fertilizer losses not only provides for environmental benefits but increases the potential to achieve maximum profitability from the crop production enterprise.



PESTICIDE APPLICATOR NEWSLETER

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DEPARTMENT OF AGRICULTURE
Division of Agricultural Services
Foss Building, 523 East Capitol
Pierre, South Dakota 57501-3188

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26,000 copies of this newsletter were printed by the Department of Agriculture at a cost of \$0.138 each.

Unusable Pesticide Registration Underway

As part of the Governor's 'Spruce Up South Dakota' campaign, the Department is accepting pre-registrations for the 2000 Unusable Pesticide Collection. The collections are scheduled for at least seven sites across the state. Registrations are being accepted until October 6. Site locations and dates will be released in a letter to those completing pre-registrations.

This program is intended to properly dispose of products that are no longer usable. The service is provided at no cost to the registrants and has successfully removed more than 100 tons of unusable pesticide products from the state since 1993. To pre-register your products, complete the form below and send it to the Department. For more information on pre-registering your unusable pesticides, contact the South Dakota Department of Agriculture at 1-800-228-5254 or your county extension office.

NAME _____ PHONE NUMBER () _____

MAILING ADDRESS _____

NAME OF PRODUCT	MANUFACTURER	ACTIVE INGREDIENT	USDA / EPA REG. NO.	APPROX. AMOUNT	LIQUID	DRY	CONTAINER TYPE, SIZE & CONDITION
"EXAMPLE" DDT	TOXO	DDT 10%	0000-000	20 lbs.		X	Original Paper Sack